(FILE 'HOME' ENTERED AT 09:11:33 ON 03 MAY 2001)

FILE 'MEDLINE, CAPLUS, USPATFULL, WPIDS, DGENE, EUROPATFULL, JAPIO, AGRICOLA' ENTERED AT 09:12:06 ON 03 MAY 2001

L1 3292 S (PRO (W) PEPTIDE) OR (PRO (W) REGION) OR (PRO (W) SEQUENCE)
L2 482 S L1 AND (FUSION (W) PROTEIN)
L3 28 S L2 AND AUTOCATALYTIC?
L4 48 S L2 AND ZYMOGEN

L3 ANSWER 1 OF 28 MEDLINE
ACCESSION NUMBER: 91053175 MEDLINE
DOCUMENT NUMBER: 91053175 PubMed ID: 2241167
TITLE: Human immunodeficiency viral protease is catalytically active as a **fusion protein**: characterization of the fusion and native enzymes produced in Escherichia coli.
AUTHOR: Boutelje J; Karlstrom A R; Hartmanis M G; Holmgren E; Sjogren A; Levine R L
CORPORATE SOURCE: Laboratory of Biochemistry, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, Maryland 20892.
SOURCE: ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1990 Nov 15) 283 (1) 141-9.
Journal code: 6SK; 0372430. ISSN: 0003-9861.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199012
ENTRY DATE: Entered STN: 19910208
Last Updated on STN: 19970203
Entered Medline: 19901224

AB Processing of the gag and pol gene precursor proteins of retroviruses is essential for the production of mature infectious virions. The processing is directed by a viral protease that itself is part of these precursors and is presumed to cleave itself **autocatalytically**. To facilitate study of this process, the protease was produced as a **fusion protein** in Escherichia coli. In this construct, the 10,793-Da protease was preceeded by two copies of a modified IgG binding domain derived from protein A. The IgG binding domain was linked to the protease by an Asp-**Pro peptide** bond which could not be cleaved by the viral protease. A dimer of the 25,400-Da **fusion protein** was catalytically active, specifically cleaving a substrate peptide at the correct Tyr-Pro bond. Thus, the **fusion protein** could serve as a model of the viral gag-pol polyprotein. The finding that the **fusion protein** was catalytically active supports the suggestion that a gag-pol dimer can initiate a proteolytic cascade after budding of the immature virus. The **fusion protein** also provided a source of authentic protease. The protease was released from the fusion construct by incubation with formic acid, cleaving the Asp-Pro linkage which had been inserted between the IgG binding domain and the protease.

L3 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:728582 CAPLUS
DOCUMENT NUMBER: 130:11268
TITLE: Manufacture of proteins as fusion products with zymogen propeptides for processing of fusion products
INVENTOR(S): Moloney, Maurice; Alcantara, Joenel; Van Rooijen, Gijs
PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Can.
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9849326	A1	19981105	WO 1998-CA398	19980423
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9870240	A1	19981124	AU 1998-70240	19980423
EP 977873	A1	20000209	EP 1998-916746	19980423

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

BR 9809416	A	20000613	BR 1998-9416		19980423
ZA 9803471	A	19981027	ZA 1998-3471		19980424
PRIORITY APPLN. INFO.:			US 1997-44254	P	19970425
			WO 1998-CA398	W	19980423

AB An improved method for manuf. of proteins in a foreign host as a fusion product is described. The method involves synthesis of the protein as a fusion product with a **pro-peptide** of an **autocatalytically** maturing zymogen that does not process itself in the expression host but that will process in the target organism. The **fusion protein** can then be administered to the host where it will be processed to release the protein of interest. This avoids the need to purify the **fusion protein**, cleave it and sep. the cleavage products. Alternatively, an expression construct for the **fusion protein** can be introduced directly into the target organism. The **pro-peptide**-polypeptide **fusion protein** can be cleaved and the recombinant polypeptide released under the appropriate conditions, e.g as a feed additive that is activated in the stomach. A chimeric gene for a **fusion protein** of hirudin, glutathione-S-transferase and the **pro-peptide** of chymosin B was constructed using the pGEX expression system and the protein manufd. in Escherichia coli. A significant fraction (5-10%) of the protein accumulated in the cytoplasm with the remainder in inclusion bodies. Incubation of the sol. fraction with chymosin at pH 4.5 resulted in the appearance of an anti-thrombin activity. Incubation at pH 2.0 did not lead to processing of the **fusion protein**. A **fusion protein** of prochymosin and carp growth hormone was accurately processed by exts. of the gut of the red turnip beetle Entomoscelis americana.

REFERENCE COUNT: 2
REFERENCE(S): (1) Genex Corp; EP 0134662 A 1985 CAPLUS
(2) Univ Technologies Int; WO 9621029 A 1996 CAPLUS

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1995:672993 CAPLUS
DOCUMENT NUMBER: 123:106167
TITLE: Lysine-based structure in the proregion of procathepsin L is the recognition site for mannose phosphorylation
AUTHOR(S): Cuozzo, John W.; Tao, Kai; Wu, Qi-long; Young, Wen; Sahagian, G. Gary
CORPORATE SOURCE: Dep. Physiol., Tufts Univ. Sch. Med., Boston, MA, 02111, USA
SOURCE: J. Biol. Chem. (1995), 270(26), 15611-19
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The recognition of lysosomal enzymes by lysosomal enzyme precursor acetylglucosamine-1-phosphotransferase is mediated by a protein structure on lysosomal enzymes. It was previously demonstrated that Lys residues are required for phosphorylation of procathepsin L and are a common feature of the site on many lysosomal proteins. Here, the procathepsin L recognition structure was further defined by identification of the region of the protein contg. the structure and the crit. Lys residues involved. Removal of the cathepsin L propeptide by low pH-induced **autocatalytic** processing abolished phosphorylation. The addn. of either the purified propeptide or a glutathione S-transferase-propeptide **fusion protein** to the processed protein restored phosphorylation. Mutagenesis of individual Lys residues demonstrated that 2 propeptide Lys residues (Lys-54 and Lys-99) were required for efficient phosphorylation of procathepsin L. By comparison of the phosphorylation rates of procathepsin L, Lys-modified procathepsin L, and the procathepsin L oligosaccharide, Lys residues were shown to account for most, if not all, of the protein-dependent interaction. On this basis, it was concluded that the **pro region** Lys residues are the major elements of the procathepsin L recognition site. In addn., Lys residues in cathepsin D were shown to be as important for phosphorylation as those in procathepsin L, supporting a general model of the recognition site as a specific 3-dimensional arrangement of Lys residues exposed on the surface of lysosomal proteins.

L3 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1991:56827 CAPLUS
DOCUMENT NUMBER: 114:56827
TITLE: Human immunodeficiency viral protease is catalytically active as a **fusion protein**: characterization of the fusion and native enzymes produced in Escherichia coli
AUTHOR(S): Boutelje, John; Karlstroem, Anders R.; Hartmanis,

Ma[redacted]G. N.; Holmgren, Erik; Sjoegren, Annel[redacted]
Lev[redacted]e, Rodney L.
CORPORATE SOURCE: Lab. Biochem., Natl. Heart, Lung, Blood Inst., Bethesda, MD, 20892, USA
SOURCE: Arch. Biochem. Biophys. (1990), 283(1), 141-9
CODEN: ABBIA4; ISSN: 0003-9861
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Processing of the gag and pol gene precursor proteins of retroviruses is essential for the prodn. of mature infectious virions. The processing is directed by a viral protease that itself is part of these precursors and is presumed to cleave itself **autocatalytically**. To facilitate study of this process, the protease was produced as a **fusion protein** in Escherichia coli. In this construct, the 10,793-Da protease was preceded by two copies of a modified IgG binding domain derived from protein A. The IgG binding domain was linked to the protease by an Asp-**Pro peptide** bond which could not be cleaved by the viral protease. A dimer of the 25,400-Da **fusion protein** was catalytically active, specifically cleaving a substrate peptide at the correct Tyr-Pro bond. Thus, the **fusion protein** could serve as a model of the viral gag-pol polyprotein. The finding that the **fusion protein** was catalytically active supports the suggestion that a gag-pol dimer can initiate a proteolytic cascade after budding of the immature virus. The **fusion protein** also provided a source of authentic protease. The protease was released from the fusion construct by incubation with formic acid, cleaving the Asp-Pro linkage which had been inserted between the IgG binding domain and the protease.

L3 ANSWER 5 OF 28 USPATFULL
ACCESSION NUMBER: 2001:52018 USPATFULL
TITLE: Method of using hedgehog polypeptides to regulate neuronal cell growth
INVENTOR(S): Beachy, Philip A., Baltimore, MD, United States
Moon, Randall T., Seattle, WA, United States
Porter, Jeffrey A., Baltimore, MD, United States
PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)
University of Washington, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6214794	20010410
APPLICATION INFO.:	US 1996-729743	19961007 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-567357, filed on 4 Dec 1995 Continuation-in-part of Ser. No. US 1994-349498, filed on 2 Dec 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Spector, Lorraine
ASSISTANT EXAMINER: Kaufman, Claire M.
LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP; Haile, Ph.D., Lisa A.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 110 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 3784
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides two novel polypeptides, referred to as the "N" and "C" fragments of hedgehog, or N-terminal and C-terminal fragments, respectively, which are derived after specific cleavage at a Gly.dwnarw.Cys Phe site recognized by the autoproteolytic domain in the native protein. Methods of identifying compositions which affect hedgehog activity based on inhibition of cholesterol modification of hedgehog protein are described. Also provided are methods of use of the N and C fragments.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 28 USPATFULL
ACCESSION NUMBER: 2000:131616 USPATFULL
TITLE: Method for expression of proteins in bacterial host cells
INVENTOR(S): Bartfeld, Daniel, Vancouver, Canada
Butler, Michael J., Cambridge, United Kingdom
Hadary, Dany, Vancouver, Canada
Jenish, David L., Mississauga, Canada
Krieger, Timothy J., Richmond, Canada
Malek, Lawrence T., Brampton, Canada
Soostmeyer, Gisela, Kleinburg, Canada
Walczyk, Eva, Mississuaga, Canada

Kry[redacted]an, Phyllis, Brampton, Canada
Gar[redacted], Sheila, Oakville, Canada
PATENT ASSIGNEE(S): Cangene Corporation, Mississauga, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6127144	20001003
APPLICATION INFO.:	US 1997-951742	19971016 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-265310, filed on 24 Jun 1994, now patented, Pat. No. US 5856166 which is a continuation-in-part of Ser. No. US 1993-173508, filed on 23 Dec 1993, now patented, Pat. No. US 5616485
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Tung, Peter P.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 44 Drawing Page(s)
LINE COUNT: 3466
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aminopeptidase inhibitor is used when expressing heterologous protein in a bacterial host, such as Streptomyces. Use of such an inhibitor inhibits degradation of the heterologous protein by aminopeptidases. Inhibitors are designed based upon the mechanism and substrate specificity of the target protease and expressed protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 28 USPATFULL
ACCESSION NUMBER: 2000:53875 USPATFULL
TITLE: Method of identifying compounds affecting hedgehog cholesterol transfer
INVENTOR(S): Beachy, Philip A., Baltimore, MD, United States
Porter, Jeffrey A., Belmont, MA, United States
PATENT ASSIGNEE(S): The Johns Hopkins University School of Medicine, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6057091	20000502
APPLICATION INFO.:	US 1997-946329	19971007 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-729743, filed on 7 Oct 1996 which is a continuation-in-part of Ser. No. US 1995-567357, filed on 4 Dec 1995 which is a continuation-in-part of Ser. No. US 1994-349498, filed on 2 Dec 1994

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-61323	19971002 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Spector, Lorraine
ASSISTANT EXAMINER: Kaufman, Claire M.
LEGAL REPRESENTATIVE: Gray Cary Ware & Freidenrich LLP; Haile, Lisa A.
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 126 Drawing Figure(s); 54 Drawing Page(s)
LINE COUNT: 6997
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides two novel polypeptides, referred to as the "N" and "C" fragments of hedgehog, or N-terminal and C-terminal fragments, respectively, which are derived after specific cleavage at a G.sup..dwnarw. CF site recognized by the autoproteolytic domain in the native protein. Also included are sterol-modified hedgehog polypeptides and functional fragments thereof. Methods of identifying compositions which affect hedgehog activity based on inhibition of cholesterol modification of hedgehog protein are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 28 USPATFULL
ACCESSION NUMBER: 1999:146778 USPATFULL
TITLE: Expression of pace in host cells and methods of use thereof
INVENTOR(S): Barr, Philip J., Berkeley, CA, United States
Brake, Anthony J., Berkeley, CA, United States
Kaufman, Randal J., Boston, MA, United States
Tekamp-Olson, Patricia, San Anselmo, CA, United States

Was[redacted], Louise, Medfield, MA, United States
Wong, Polly A., Mountain View, CA, United St[redacted]s
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5986079	19991116
APPLICATION INFO.:	US 1995-480382	19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1992-885972, filed on 20 May 1992, now patented, Pat. No. US 5460950 which is a continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Achutamurthy, Ponnathapura
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Howson and Howson
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 2715
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 9 OF 28 USPATFULL
ACCESSION NUMBER: 1999:124761 USPATFULL
TITLE: Expression of pace in host cells and methods of use thereof
INVENTOR(S): Barr, Philip J., Berkeley, CA, United States
Brake, Anthony J., Berkeley, CA, United States
Kaufman, Randal J., Boston, MA, United States
Tekamp-Olson, Patricia, San Anselmo, CA, United States
Wasley, Louise, Medfield, MA, United States
Wong, Polly A., Mountain View, CA, United States
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5965425	19991012
APPLICATION INFO.:	US 1996-745880	19961108 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-480382, filed on 7 Jun 1995 which is a division of Ser. No. US 1992-885972, filed on 20 May 1992, now patented, Pat. No. US 5460950 which is a continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Achutamurthy, Ponnathapura
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Howson and Howson
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 2718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 10 OF 28 USPATFULL

ACCESSION NUMBER:	1999:1504 USPATFULL
TITLE:	Streptomyces proteases and methods for improved secretion of recombinantly-expressed proteins
INVENTOR(S):	Bartfeld, Daniel, North York, Canada Butler, Michael J., Cambridge, United Kingdom Hadary, Dany, Richmond Hill, Canada Jenish, David L., Mississauga, Canada Krieger, Timothy J., Brampton, Canada Malek, Lawrence T., Brampton, Canada Soostmeyer, Gisela, Kleinburg, Canada Walczyk, Eva, Mississauga, Canada Krygsman, Phyllis, Bolton, Canada Garven, Sheila, Oakville, Canada
PATENT ASSIGNEE(S):	Cangene Corporation, Winnipeg, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5856166	19990105
APPLICATION INFO.:	US 1994-265310	19940624 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-173508, filed on 23 Dec 1993, now patented, Pat. No. US 5616485, issued on 11 Apr 1997	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Wax, Robert A.	
ASSISTANT EXAMINER:	Moore, William W.	
LEGAL REPRESENTATIVE:	Foley & Lardner	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	49 Drawing Figure(s); 44 Drawing Page(s)	
LINE COUNT:	2766	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A family of proteases endogenous to Streptomyces cells degrades heterologous proteins secreted from Streptomyces host cells. The previously unidentified proteases include (1) tripeptidyl aminopeptidase--Streptomyces ("Tap"), (2) a Streptomyces protease ("Ssp") which displayed significant amino acid sequence homology to Subtilisin BPN' and showed an ability to remove tripeptides from the amino termini of proteins and peptides, and (3) other proteases derived from Streptomyces which degraded certain substrates under certain conditions. Degradation was alleviated by selective inhibition of secreted proteases or by using hosts with impaired capabilities to produce proteases. An irreversible inhibitor was designed based upon the mechanism and substrate specificity of the target protease. Hosts secreting high amounts of proteases were selected. Impaired hosts were produced by deleting or altering the nucleotide sequence for the proteases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 11 OF 28 USPATFULL

ACCESSION NUMBER:	1998:92179 USPATFULL
TITLE:	Development of research diagnostic and production tools for pro-hormone convertases
INVENTOR(S):	Seidah, Nabil G., Ile-des-Soeurs, Canada Chretien, Michel, Montreal, Canada
PATENT ASSIGNEE(S):	Institut de Recherches Cliniques de Montreal, Montreal, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5789564	19980804
APPLICATION INFO.:	US 1996-712241	19960912 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1995-529785, filed on 18 Sep 1995, now abandoned which is a continuation of Ser. No. US 1992-963535, filed on 20 Oct 1992, now abandoned	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Houtteman, Scott W.	
LEGAL REPRESENTATIVE:	Quarles & Brady	
NUMBER OF CLAIMS:	13	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 8 Drawing Page(s)	
LINE COUNT:	1675	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to pro-hormone convertases and polypeptidic fragments thereof, nucleic acids encoding them, recombinant

viruses expressing [redacted]e convertases, polyclonal antibodies d[redacted]cted against the convert[redacted]s, diagnostic kits for the detection a[redacted] measurement of the convertase content in cell or tissue lysates, culture media or biological fluids by RIA. Diagnostic kits were also developped for detection or measurement of nucleic acids, preferably mRNAs, in cell or tissue lysates by hybridization. The invention also concerns oligonucleotides useful as probes or as primers for DNA synthesis. These oligonucleotides were included in the diagnostic kits as well as used for the obtention of specific fragments of the convertases which have served, together with native convertases, as antigens for the obtention of antibodies. The convertases were produced by mammalian cell lines transfected with the recombinant viruses and purified on affinity columns which are also an object of the invention. Processes for producing the native convertases, fragments thereof and antibodies are also described and claimed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 28 USPATFULL

ACCESSION NUMBER:	1998:82572 USPATFULL
TITLE:	Intron-mediated recombinant techniques and reagents
INVENTOR(S):	Jarrell, Kevin A., Boston, MA, United States
PATENT ASSIGNEE(S):	President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5780272	19980714
APPLICATION INFO.:	US 1995-488015	19950607 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1993-119512, filed on 10 Sep 1993, now patented, Pat. No. US 5498531	
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Degen, Nancy	
LEGAL REPRESENTATIVE:	Vincent, Matthew P.; Arnold, Beth E.Foley, Hoag & Eliot LLP	
NUMBER OF CLAIMS:	45	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	31 Drawing Figure(s); 19 Drawing Page(s)	
LINE COUNT:	3250	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention makes available methods and reagents for novel manipulation of nucleic acids. As described herein, the present invention makes use of the ability of intronic sequences, such as derived from group I, group II, or nuclear pre-mRNA introns, to mediate specific cleavage and ligation of discontinuous nucleic acid molecules. For example, novel genes and gene products can be generated by admixing nucleic acid constructs which comprise exon nucleic acid sequences flanked by intron sequences that can direct trans-splicing of the exon sequences to each other. The flanking intronic sequences can, by intermolecular complementation, form a reactive complex which promotes the transesterification reactions necessary to cause the ligation of discontinuous nucleic acid sequences to one another, and thereby generate a recombinant gene comprising the ligated exons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 28 USPATFULL

ACCESSION NUMBER:	1998:68808 USPATFULL
TITLE:	Polypeptides
INVENTOR(S):	Ballance, David J., Nottingham, United Kingdom Goodey, Andrew R., Nottingham, United Kingdom
PATENT ASSIGNEE(S):	Delta Biotechnology Limited, Nottingham, United Kingdom (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5766883	19980616
APPLICATION INFO.:	US 1993-153799	19931117 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-847975, filed on 6 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-775952, filed on 29 Oct 1991, now abandoned	

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1989-9916	19890429
	WO 1990-GB650	19900426
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Grimes, Eric	
NUMBER OF CLAIMS:	9	

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 1179
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fusion polypeptide comprising, as at least part of the N-terminal portion thereof, an N-terminal portion of HSA or a variant thereof and, as at least part of the C-terminal portion thereof, another polypeptide except that, when the said N-terminal portion of HSA is the 1-n portion where n is 369 to 419 or a variant thereof then the said polypeptide is one of various specified entities.

The HSA-like portion may have additional N-terminal residues, such as secretion leader sequences (signal sequences). The C-terminal portion is preferably the amino terminal fragment of human urokinase-type plasminogen activator. The N-terminal and C-terminal portions may be cleavable to yield the isolated C-terminal portion, with the N-terminal portion having served to facilitate secretion from the host. Such cleavage can be achieved in yeast using a sequence cleavable by the KEX2 protease of S. cerevisiae.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 14 OF 28 USPATFULL
ACCESSION NUMBER: 97:81118 USPATFULL
TITLE: Cloning of enterokinase and method of use
INVENTOR(S): LaVallie, Edward R., Tewksbury, MA, United States
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5665566	19970909
APPLICATION INFO.:	US 1994-200900	19940223 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-5944, filed on 15 Jan 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Caputa, Anthony C.
LEGAL REPRESENTATIVE: Meinert, M. C.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 9,10,11,12
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1450
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are nucleic acid sequence sequences encoding enterokinase activity, the expression products thereof, and methods for using same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 15 OF 28 USPATFULL
ACCESSION NUMBER: 97:66026 USPATFULL
TITLE: Substrate assisted catalysis
INVENTOR(S): Carter, Paul John, San Francisco, CA, United States
Wells, James Allen, Burlingame, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5652136	19970729
APPLICATION INFO.:	US 1995-488096	19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-287964, filed on 22 Sep 1994, now patented, Pat. No. US 5472855 which is a division of Ser. No. US 1993-90902, filed on 12 Jul 1993, now patented, Pat. No. US 5371190 which is a continuation of Ser. No. US 1992-823039, filed on 14 Jan 1992, now abandoned which is a continuation-in-part of Ser. No. US 1987-35652, filed on 6 Apr 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned , said Ser. No. US 1992-823039, filed on 14 Jan 1992, now abandoned which is a continuation of Ser. No. US 1989-334081, filed on 4 Apr 1989, now abandoned which is a continuation-in-part of Ser. No. US 1987-127134, filed on 1 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-846627, filed on 1 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned And a continuation-in-part of Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned which is a

continuation-in-part of Ser. No. US 1984-614618, filed on 29 May 1984, now patented, Pat. No. US 4775 And a continuation-in-part of Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned And a continuation-in-part of Ser. No. US 1984-614617, filed on 29 May 1984, now abandoned And a continuation-in-part of Ser. No. US 1984-614491, filed on 29 May 1984, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Trecartin, Richard F.Flehr Hohbach Test Albritton & Herbert LLP
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 28 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2516
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel enzyme mutants are disclosed which are derived from a precursor enzyme by replacing or modifying at least one catalytic functional group of an amino acid residue in a precursor enzyme. Such mutant enzymes have a catalytic preference for substrates which provide the replaced or modified catalytic group or its equivalent such that the substrate together with the enzyme mutant assists in its own catalysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 16 OF 28 USPATFULL
ACCESSION NUMBER: 96:21012 USPATFULL
TITLE: Intron-mediated recombinant techniques and reagents
INVENTOR(S): Jarrell, Kevin A., Arlington, MA, United States
PATENT ASSIGNEE(S): President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5498531	19960312
APPLICATION INFO.:	US 1993-119512	19930910 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Fleisher, Mindy
ASSISTANT EXAMINER: Carter, Philip W.
LEGAL REPRESENTATIVE: Vincent, Matthew P.; DeConti, Jr., Giulio A.Lahive & Cockfield
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 2933
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention makes available methods and reagents for novel manipulation of nucleic acids. As described herein, the present invention makes use of the ability of intronic sequences, such as derived from group I, group II, or nuclear pre-mRNA introns, to mediate specific cleavage and ligation of discontinuous nucleic acid molecules. For example, novel genes and gene products can be generated by admixing nucleic acid constructs which comprise exon nucleic acid sequences flanked by intron sequences that can direct trans-splicing of the exon sequences to each other. The flanking intronic sequences can, by intermolecular complementation, form a reactive complex which promotes the transesterification reactions necessary to cause the ligation of discontinuous nucleic acid sequences to one another, and thereby generate a recombinant gene comprising the ligated exons.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 17 OF 28 USPATFULL
ACCESSION NUMBER: 95:108076 USPATFULL
TITLE: Substrate assisted catalysis
INVENTOR(S): Carter, Paul J., San Francisco, CA, United States
Wells, James A., Burlingame, CA, United States
PATENT ASSIGNEE(S): Genentech, Inc., San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5472855	19951205
APPLICATION INFO.:	US 1994-287964	19940922 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1993-90902, filed on 12 Jul 1993, now patented, Pat. No. US 5371190 which is a continuation of Ser. No. US 1992-823039, filed on 14 Jan 1992, now abandoned which is a continuation-in-part of Ser. No. US 1987-35652, filed on 6 Apr 1987, now	

ab[redacted]ned And a continuation of Ser. No. US[redacted] 198[redacted]334081, filed on 4 Apr 1989, now abandoned which is a continuation-in-part of Ser. No. US 1987-127134, filed on 1 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-846627, filed on 1 Apr 1986, now abandoned And Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614612, filed on 29 May 1984, now patented, Pat. No. US 4760025 Ser. No. Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned Ser. No. Ser. No. US 1984-614617, filed on 29 May 1984, now abandoned And Ser. No. US 1984-614491, filed on 29 May 1984, now abandoned , said Ser. No. US -846627 which is a continuation-in-part of Ser. No. US -614615 , said Ser. No. US -35652 which is a continuation-in-part of Ser. No. US -858594

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 36 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2485
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel enzyme mutants are disclosed which are derived from a precursor enzyme by replacing or modifying at least one catalytic functional group of an amino acid residue in a precursor enzyme. Such mutant enzymes have a catalytic preference for substrates which provide the replaced or modified catalytic group or its equivalent such that the substrate together with the enzyme mutant assists in its own catalysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 28 USPATFULL
ACCESSION NUMBER: 95:94816 USPATFULL
TITLE: Expression of PACE in host cells and methods of use thereof
INVENTOR(S): Barr, Philip J., Berkeley, CA, United States
Brake, Anthony J., Berkeley, CA, United States
Kaufman, Randal J., Boston, MA, United States
Wasley, Louise, Medfield, MA, United States
Tekamp-Olson, Patricia, San Anselmo, CA, United States
Wong, Polly A., Mountain View, CA, United States
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5460950	19951024
APPLICATION INFO.:	US 1992-885972	19920520 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Howson and Howson
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 2683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 28 USPATFULL

ACCESSION NUMBER: 94:1[redacted]8 USPATFULL
TITLE: Subst[redacted]te assisted catalysis
INVENTOR(S): Carter, Paul J., San Francisco, CA, United States
Wells, James A., Burlingame, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5371190	19941206
APPLICATION INFO.:	US 1993-90902	19930712 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-823039, filed on 14 Jan 1992, now abandoned And a continuation-in-part of Ser. No. US 1987-35652, filed on 6 Apr 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned , said Ser. No. US -823039 which is a continuation of Ser. No. US 1989-334081, filed on 4 Apr 1989, now abandoned which is a continuation-in-part of Ser. No. US 1987-127134, filed on 1 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-846627, filed on 1 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned And Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614612, filed on 29 May 1984, now patented, Pat. No. US 4760025 And Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned And Ser. No. US 1984-614617, filed on 29 May 1984, now abandoned And Ser. No. US 1984-614491, filed on 29 May 1984, now abandoned

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2496
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel enzyme mutants are disclosed which are derived from a precursor enzyme by replacing or modifying at least one catalytic functional group of an amino acid residue in a precursor enzyme. Such mutant enzymes have a catalytic preference for substrates which provide the replaced or modified catalytic group or its equivalent such that the substrate together with the enzyme mutant assists in its own catalysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 28 USPATFULL
ACCESSION NUMBER: 94:106709 USPATFULL
TITLE: Substrate assisted catalysis
INVENTOR(S): Carter, Paul J., San Francisco, CA, United States
Wells, James A., Burlingame, CA, United States
PATENT ASSIGNEE(S): Genencor International, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5371008	19941206
APPLICATION INFO.:	US 1993-90472	19930712 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-909999, filed on 7 Jul 1992, now abandoned And a continuation-in-part of Ser. No. US 1987-35652, filed on 6 Apr 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned , said Ser. No. US -909999 which is a division of Ser. No. US 1992-823039, filed on 14 Jan 1992, now abandoned which is a continuation of Ser. No. US 1989-334081, filed on 4 Apr 1989 which is a continuation-in-part of Ser. No. US 1987-127134, filed on 1 Dec 1987, now abandoned which is a continuation-in-part of Ser. No. US 1986-846627, filed on 1 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned And a continuation-in-part of Ser. No. US 1986-858594, filed on 30 Apr 1986, now abandoned which is a continuation-in-part of Ser. No. US 1984-614612, filed on 29 May 1984, now patented, Pat. No. US 4760025, issued on 26 Jul 1988 Ser. No. Ser. No. US 1984-614615, filed on 29 May 1984, now abandoned Ser. No. Ser. No.

US 1[redacted]614617, filed on 29 May 1984, now aban[redacted]ed And Ser. [redacted]. US 1984-614491, filed on 29 May 1984, [redacted]w abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Flehr, Hohbach, Test, Albritton & Herbert
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel enzyme mutants are disclosed which are derived from a precursor enzyme by replacing or modifying at least one catalytic functional group of an amino acid residue in a precursor enzyme. Such mutant enzymes have a catalytic preference for substrates which provide the replaced or modified catalytic group or its equivalent such that the substrate together with the enzyme mutant assists in its own catalysis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 21 OF 28 USPATFULL
ACCESSION NUMBER: 89:7503 USPATFULL
TITLE: Vector for expression of polypeptides in bacilli
INVENTOR(S): Nagarajan, Vasantha, Rockville, MD, United States
Rhodes, Craig S., Washington, DC, United States
Banner, Carl D. B., Bethesda, MD, United States
PATENT ASSIGNEE(S): Genex Corporation, Gaithersburg, MD, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4801537	19890131
APPLICATION INFO.:	US 1985-717800	19850329 (6)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1984-618902, filed on 8 Jun 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-511198, filed on 6 Jul 1983, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Mays, Thomas D.
LEGAL REPRESENTATIVE: Saidman, Sterne, Kessler & Goldstein
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1104
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A replicable plasmidic expression vector, capable of high levels of expression and secretion of polypeptides in a bacillus is disclosed. The vector contains a DNA sequence comprising the promoter and regulatory regions which control expression and secretion of proteases in a bacillus operably liked to a DNA sequence encoding the amino acid sequence of a polypeptide. The expression vector is particularly useful in the production of B. amyloliquefaciens proteases or other heterologous proteins in B. subtilis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 22 OF 28 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999-059646 [05] WPIDS
DOC. NO. CPI: C1999-017483
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen and a heterologous polypeptide.
DERWENT CLASS: B04 D13 D16
INVENTOR(S): ALCANTARA, J; MOLONEY, M; VAN ROOIJEN, G; VAN ROOI-JEN, G
PATENT ASSIGNEE(S): (SEMB-N) SEMBIOSYS GENETICS INC
COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9849326	A1	19981105	(199905)*	EN	43

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

ZA 9803471 A 19990[redacted] (199910) 53
AU 9870240 A 1998112[redacted] (199914)
EP 977873 A1 20000209 (200012) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
BR 9809416 A 20000613 (200037)
MX 9909801 A1 20000301 (200123)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9849326	A1	WO 1998-CA398	19980423
ZA 9803471	A	ZA 1998-3471	19980424
AU 9870240	A	AU 1998-70240	19980423
EP 977873	A1	EP 1998-916746	19980423
		WO 1998-CA398	19980423
BR 9809416	A	BR 1998-9416	19980423
		WO 1998-CA398	19980423
MX 9909801	A1	MX 1999-9801	19991025

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9870240	A	Based on	WO 9849326
EP 977873	A1	Based on	WO 9849326
BR 9809416	A	Based on	WO 9849326

PRIORITY APPLN. INFO: US 1997-44254 19970425
AN 1999-059646 [05] WPIDS
AB WO 9849326 A UPAB: 19990316
Preparation of a recombinant polypeptide comprising: (a) introducing into a host cell an expression vector comprising: (i) a nucleic acid sequence capable of regulating transcription in a host cell, operatively linked to; (ii) a chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen, linked in reading frame to a nucleic acid sequence heterologous to the **pro-peptide** and encoding the recombinant polypeptide, operatively linked to; (iii) a nucleic acid sequence encoding a termination region functional in the host cell; (b) growing the host cell to produce the **fusion protein**, and (c) altering the environment of the **fusion protein** so that the **pro-peptide** is cleaved from the **fusion protein** to release the recombinant polypeptide. Also claimed are: (1) a chimeric nucleic acid sequence encoding a **fusion protein** comprising: (a) a nucleic acid sequence encoding a **pro-peptide** from an **autocatalytically** maturing zymogen, and (b) a nucleic acid sequence encoding a polypeptide that is heterologous to the **pro-peptide**; (2) an expression vector comprising a chimeric nucleic acid sequence as in (1) and a regulatory sequence suitable for expression in a host cell; (3) a transformed host cell containing an expression vector as in (2), and (4) a **fusion protein** comprising: (i) a **pro-peptide** derived from an **autocatalytically** maturing zymogen, linked to, and (ii) a polypeptide that is heterologous to the **pro-peptide**.
USE - The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone (claimed). The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase (claimed).
ADVANTAGE - The method can provide for the efficient cleavage and purification of recombinant polypeptides.
Dwg.0/5

L3 ANSWER 23 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999P-W87637 Protein DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence represents a **fusion protein**

comprising a His tag-[redacted]ne chymosin **pro-peptide**-carp growth hormone. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L3 ANSWER 24 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999P-W87636 Protein DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence represents a **fusion protein** comprising glutathione-S-transferase (GST)-bovine chymosin **pro-peptide**-leech hirudin. The chymosin **pro-peptide** sequence is placed upstream of the DNA sequence encoding the leech anticoagulant protein hirudin. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L3 ANSWER 25 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999N-V83967 DNA DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence encodes a **fusion protein** comprising a His tag-bovine chymosin **pro-peptide**-carp growth hormone. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be

used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L3 ANSWER 26 OF 28 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999N-V83966 DNA DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence encodes a **fusion protein** comprising glutathione-S-transferase (GST)-bovine chymosin **pro-peptide**-leech hirudin. The chymosin **pro-peptide** sequence is placed upstream of the DNA sequence encoding the leech anticoagulant protein hirudin. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an **autocatalytically** maturing zymogen linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L3 ANSWER 27 OF 28 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 785273 EUROPATFULL EW 199730 FS OS
TITLE: Paired basic amino acid converting enzyme and DNA sequence encoding it.
Gepaarte basische Aminosaeuren konvertierendes Enzym und dafuer kodierende DNA Sequenz.
Enzyme de conversion d'acides amines basiques couples et sequence d'ADN codant pour cette enzyme.
INVENTOR(S): Barr, Philip J., 2424 Stockbridge Drive, Oakland, CA 94611, US;
Brake, Anthony J., 2115 Los Angeles Avenue, Berkeley, CA 94707, US;
Kaufman, Randal J., 111 Marlborough Street, Apt. 1, Boston, MA 02116, US;
Tekamp-Olson, Patricia, 80 Camino de Herrera, San Anselmo, CA 94960, US;
Wasley, Louise, 11 Spring Valley Road, Medfield, MA 02052, US;
Wong, Polly A., 516 View Street, Mountain View, CA 94041, US
PATENT ASSIGNEE(S): GENETICS INSTITUTE, INC., 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, US;
CHIRON CORPORATION, 4560 Horton Street, R440, Emeryville California 94608-2916, US
PATENT ASSIGNEE NO: 538152; 572531
AGENT: Hale, Stephen Geoffrey, JY & GW Johnson, Kingsbourne House, 229-231 High Holborn, London WC1V 7DP, GB
AGENT NUMBER: 31411
OTHER SOURCE: ESP1997041 EP 0785273 A1 970723
SOURCE: Wila-EPZ-1997-H30-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 785273	A1	19970723
'OFFENLEGUNGS' DATE:			19970723
APPLICATION INFO.:	EP 1996-119683		19911126
PRIORITY APPLN. INFO.:	US 1990-621092		19901126
	US 1990-620859		19901126
	US 1990-621443		19901126
	US 1990-621457		19901130
RELATED DOC. INFO.:	EP 574402	DIV	

L3 ANSWER 28 OF 28 EUROPATFULL COPYRIGHT 2001 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 574402 EUROPATFULL EW 199740 FS PS
TITLE: EXPRESSION OF PACE IN HOST CELLS AND METHODS OF USE THEREOF.
EXPRESSION VON PACE IN WIRTSZELLEN UND VERFAHREN ZU DESSEN VERWENDUNG.
EXPRESSION DE PACE DANS DES CELLULES HOTES ET PROCEDES D'UTILISATION.

INVENTOR(S): BARR, Philip, J., 2424 Stockbridge Drive, Oakland, CA 94611, US;
BRAKE, Anthony, J., 2115 Los Angeles Avenue, Berkeley, CA 94707, US;
KAUFMAN, Randal, J. 111 Marlborough Street, Apt. 1, Boston, MA 02116, US;
TEKAMP-OLSON, Patricia, 80 Camino de Herrera, San Anselmo, CA 94960, US;
WASLEY, Louise, 11 Spring Valley Road, Medfield, MA 02052, US;
WONG, Polly, A., 516 View Street, Mountain View, CA 94041, US
PATENT ASSIGNEE(S): GENETICS INSTITUTE, INC.,. 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, US;
CHIRON CORPORATION, 4560 Horton Street, R440, Emeryville California 94608-2916, US

PATENT ASSIGNEE NO: 538152; 572531
AGENT: Hale, Stephen Geoffrey et al, JY & GW Johnson, Kingsbourne House, 229-231 High Holborn, London WC1V 7DP, GB
AGENT NUMBER: 31411
OTHER SOURCE: EPB1997064 EP 0574402 B1 971001
SOURCE: Wila-EPS-1997-H40-T1
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale Anmeldung)

PATENT INFORMATION:

	PATENT NO	KIND	DATE
	EP 574402	B1	19971001
'OFFENLEGUNGS' DATE:			19931222
APPLICATION INFO.:	EP 1992-901535		19911126
PRIORITY APPLN. INFO.:	US 1990-621092		19901126
	US 1990-620859		19901129
	US 1990-621443		19901129
	US 1990-621457		19901130
RELATED DOC. INFO.:	WO 91-US8725		911126 INTAKZ
	WO 9209698		920611 INTPNR
REFERENCE PAT. INFO.:	WO 89-09220 A		WO 91-06314 A
	US 4770999 A		US 4784950 A

REF. NON-PATENT-LIT.: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA. vol. 87, no. 23, December 1990, WASHINGTON US ROBERT J. WISE ET AL. 'Expression of a human proprotein processing enzyme: Correct cleavage of the von Willebrand factor precursor at a paired basic amino acid site' THE JOURNAL OF CELL BIOLOGY vol. 111, no. 6, December 1990 pages 2851 - 2859 PATRICIA A. BRESNAHAN ET AL. 'Human fur gene encodes a yeast KEX2-like endoprotease that cleaves pro-beta -NGF in vivo' Nucleic Acids Research, Volume 18, No. 3, issued February 1990, VAN DEN OUWELAND et al., "Structural Homology Between the Human fur Gene Product and the Subtilisin Protease Encoded bny Yeast KEX2", see entire document

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=> d his

     (FILE 'HOME' ENTERED AT 09:11:33 ON 03 MAY 2001)

     FILE 'MEDLINE, CAPLUS, USPATFULL, WPIDS, DGENE, EUROPATFULL, JAPIO,
     AGRICOLA' ENTERED AT 09:12:06 ON 03 MAY 2001
L1          3292 S (PRO (W) PEPTIDE) OR (PRO (W) REGION) OR (PRO (W) SEQUENCE)
L2           482 S L1 AND (FUSION (W) PROTEIN)
L3            28 S L2 AND AUTOCATALYTIC?

=> s l2 and zymogen

L4            48 L2 AND ZYMOGEN

=> d 1- ibib abs

YOU HAVE REQUESTED DATA FROM 48 ANSWERS - CONTINUE? Y/(N):y


L4   ANSWER 1 OF 48  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         2001:168113  CAPLUS
DOCUMENT NUMBER:          134:217996
TITLE:                    Expression vector systems for expression and
                          activation of serine protease zymogens
INVENTOR(S):              Darrow, Andrew; Qi, Jenson; Andrade-Gordon, Patricia
PATENT ASSIGNEE(S):       Ortho-McNeil Pharmaceutical, Inc., USA
SOURCE:                   PCT Int. Appl., 174 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2001016289      A2   20010308       WO 2000-US22283  20000814
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                    US 1999-386642   A  19990831
AB   DNA sequences are provided encoding an expression vector system that will
     permit, through limited proteolysis, the activation of expressed
     zymogen precursor of (S1) serine proteases in a highly controlled
     and reproducible fashion.  Nucleic acids encoding pre sequences derived of
     prolactin and trypsinogen, and pro sequences derived from the EK cleavage
     site of human trypsinogen I or blood-coagulation factor Xa, are provided.
     The processed expressed protein, once activated, is rendered in a form
     amenable to measuring the catalytic activity.  This catalytic activity of
     the activated form, is often a more accurate representation of the mature
     S1 protease gene product relative to the unprocessed zymogen
     precursor.  Thus, this series of zymogen activation constructs
     represents a significant system for the anal. and characterization of
     serine protease gene products.  Proteases prostasin, O, neuropsin, F, and
     MH2 are prepd. which may be used in pharmaceutical compns., for the
     identification of physiol. substrates and specific modulators, for laundry
     detergents, and in skin care products.

L4   ANSWER 2 OF 48  CAPLUS  COPYRIGHT 2001 ACS
ACCESSION NUMBER:         1998:728582  CAPLUS
DOCUMENT NUMBER:          130:11268
TITLE:                    Manufacture of proteins as fusion products with
                          zymogen propeptides for processing of fusion
                          products
INVENTOR(S):              Moloney, Maurice; Alcantara, Joenel; Van Rooijen, Gijs
PATENT ASSIGNEE(S):       Sembiosys Genetics Inc., Can.
SOURCE:                   PCT Int. Appl., 44 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
```

WO 9849326	A1	81105	WO 1998-CA398	19980423
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9870240	A1	19981124	AU 1998-70240	19980423
EP 977873	A1	20000209	EP 1998-916746	19980423
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9809416	A	20000613	BR 1998-9416	19980423
ZA 9803471	A	19981027	ZA 1998-3471	19980424

PRIORITY APPLN. INFO.: US 1997-44254 P 19970425
WO 1998-CA398 W 19980423

AB An improved method for manuf. of proteins in a foreign host as a fusion product is described. The method involves synthesis of the protein as a fusion product with a **pro-peptide** of an autocatalytically maturing **zymogen** that does not process itself in the expression host but that will process in the target organism. The **fusion protein** can then be administered to the host where it will be processed to release the protein of interest. This avoids the need to purify the **fusion protein**, cleave it and sep. the cleavage products. Alternatively, an expression construct for the **fusion protein** can be introduced directly into the target organism. The **pro-peptide**-polypeptide **fusion protein** can be cleaved and the recombinant polypeptide released under the appropriate conditions, e.g as a feed additive that is activated in the stomach. A chimeric gene for a **fusion protein** of hirudin, glutathione-S-transferase and the **pro-peptide** of chymosin B was constructed using the pGEX expression system and the protein manufd. in Escherichia coli. A significant fraction (5-10%) of the protein accumulated in the cytoplasm with the remainder in inclusion bodies. Incubation of the sol. fraction with chymosin at pH 4.5 resulted in the appearance of an anti-thrombin activity. Incubation at pH 2.0 did not lead to processing of the **fusion protein.** A **fusion protein** of prochymosin and carp growth hormone was accurately processed by exts. of the gut of the red turnip beetle Entomoscelis americana.

REFERENCE COUNT: 2
REFERENCE(S): (1) Genex Corp; EP 0134662 A 1985 CAPLUS
(2) Univ Technologies Int; WO 9621029 A 1996 CAPLUS

L4 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:398399 CAPLUS
DOCUMENT NUMBER: 129:62968
TITLE: Fibrinogen-cleaving mast cell protease for use as antithrombotic
INVENTOR(S): Stevens, Richard L.
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Inc., USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9824886	A1	19980611	WO 1997-US21620	19971125
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1996-32354 19961204

AB Compns. contg. a trypsin-like serine protease from mast cells ("tryptase-7") are provided. The compns. are useful for treating blood clot formation in vitro and in vivo. Also provided is a novel bioengineering method to produce the tryptase-7 and other serine proteases in active form and in large quantities. This method comprises expressing in a cell a chimeric gene encoding the **pro sequence** of a serine protease **zymogen** fused to an enterokinase susceptibility domain fused to an mature serine protease. The mouse mast cell protease 7 (mMCP-7, or tryptase 7) was shown to cleave fibrinogen. Tryptase 7 was produced as a **fusion protein** (contg. the tryptase-7 propeptide fused to an enterokinase cleavage peptide which in turn was fused to the mature tryptase-7 protein) with recombinant baculovirus-infected insect cells.

L4 ANSWER 4 OF 48 USPAT
ACCESSION NUMBER: 20 4626 USPATFULL
TITLE: Nucleic acids encoding a house dust mite allergen, Der p III, and uses therefor
INVENTOR(S): Thomas, Wayne R., Nedlands, Australia
Chua, Kaw-Yan, Taipei, Taiwan, Province of China
Rogers, Bruce L., Belmont, MA, United States
Kuo, Mei-chang, Winchester, MA, United States
PATENT ASSIGNEE(S): ImmuLogic Pharmaceutical Corp., Waltham, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6180771	20010130
APPLICATION INFO.:	US 1993-163919	19931208 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Scheiner, Laurie
LEGAL REPRESENTATIVE: Lahive & Cockfield LLP; Remillard, Esq., Jane E.; DiGiorgio, Esq., Jeanne M.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1607
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Isolated nucleic acids encoding an allergen of Dermatophagoides pteronyssinus, Der p III, are disclosed. A cDNA encoding a peptide having a Der p III activity and a predicted molecular weight of about 24,985 daltons is also described. The nucleic acids can be used as probes to detect the presence of Der p III nucleic acid in a sample or for the recombinant production of peptides having an activity of Der p III. Peptides having an activity of Der p III can be used in compositions suitable for pharmaceutical administration or methods of diagnosing sensitivity to house dust mites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 48 USPATFULL
ACCESSION NUMBER: 2000:167753 USPATFULL
TITLE: Recombinant yeast cells for identifying receptor effectors
INVENTOR(S): Trueheart, Joshua, Concord, MA, United States
Paul, Jeremy I., Nyack, NY, United States
Fuernkranz, Hans A., San Jose, CA, United States
Nathan, Debra, Mt. Kisco, NY, United States
Holmes, Scott, Middlebury, CT, United States
PATENT ASSIGNEE(S): Cadus Pharmaceutical Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6159705	20001212
APPLICATION INFO.:	US 1997-936632	19970924 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-718910, filed on 24 Sep 1996, now abandoned And a continuation-in-part of Ser. No. US 1997-851469, filed on 5 May 1997, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Ulm, John
LEGAL REPRESENTATIVE: Lahive & Cockfield, LLP; DeConti, Jr., Esq., Giulio A.; Lauro, Esq., Peter C.
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 5260
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention makes available a rapid, effective assay for screening and identifying pharmaceutically effective compounds that specifically interact with and modulate the activity of a cellular protein, e.g., a receptor or ion channel. The subject assay enables rapid screening of large numbers of compounds to identify those which act as an agonist or antagonist to the bioactivity of the cellular protein. The subject assay is particularly amenable for identifying surrogate ligands for receptors especially from small molecule or peptide libraries or from peptides produced by an autocrine system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 48 USPATFULL
ACCESSION NUMBER: 2000:125211 USPATFULL
TITLE: Nematode-extracted serine protease inhibitors and

ant gulant proteins
INVENTOR(S): Vla George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Dilbeek, Belgium
Lauwereys, Marc Josef, Haaltert, Belgium
LaRoche, Yves Rene, Brusselles, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Boulder, CO, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6121435	20000919
APPLICATION INFO.:	US 1999-249448	19990212 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 809455
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 51 Drawing Page(s)
LINE COUNT: 8923
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 48 USPATFULL
ACCESSION NUMBER: 2000:113749 USPATFULL
TITLE: Polypeptides and coagulation therapy
INVENTOR(S): Gibbs, Craig S., San Francisco, CA, United States
Leung, Lawrence L. K., Hillsborough, CA, United States
Tsiang, Manuel, Foster City, CA, United States
PATENT ASSIGNEE(S): Gilead Sciences, Inc., Foster City, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6110721	20000829
APPLICATION INFO.:	US 1994-338368	19941114 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-258038, filed on 10 Jun 1994, now abandoned which is a continuation-in-part of Ser. No. US 1993-152657, filed on 12 Nov 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
LEGAL REPRESENTATIVE: Hensley, Max D.
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 2933
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel polypeptides (NPs) are provided which are capable of protein C activation without significant fibrinogen clotting activity, and vice versa. NPs having enhanced protein C activating properties in relation to fibrinogen clotting are useful in particular as anticoagulants and in screening for substances that agonize or antagonize this property and in diagnostic procedures to determine the status of patients' activated protein C-mediated anticoagulant pathway. Procoagulant NPs are useful to promote clotting in the course of therapy of solid tumors, as an impregnate for bandages, or in diagnostic assays. The NPs are produced in recombinant cell culture or by in vitro methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 8 OF 48 USPATFULL
ACCESSION NUMBER: 2000:98559 USPATFULL
TITLE: Nematode-extracted serine protease inhibitors and anticoagulant proteins
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Dilbeek, Belgium

La eys, Marc Josef, Haaltert, Belgium
La e, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Boulder, CO, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE	
PATENT INFORMATION:	US 6096877	20000801	
APPLICATION INFO.:	US 1999-249461	19990212	(9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 809455		
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Wax, Robert A.		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	30		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	53 Drawing Figure(s); 51 Drawing Page(s)		
LINE COUNT:	8933		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 48 USPATFULL

ACCESSION NUMBER:	2000:92071 USPATFULL		
TITLE:	Nematode-extracted serine protease inhibitors and anticoagulant proteins		
INVENTOR(S):	Vlasuk, George Phillip, Carlsbad, CA, United States Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium Messens, Joris Hilda Lieven, Dilbeek, Belgium Lauwereys, Marc Josef, Haaltert, Belgium LaRoche, Yves Rene, Brussels, Belgium Jespers, Laurent Stephane, Tervuren, Belgium Gansemans, Yannick Georges Jozef, Ichtegem, Belgium Moyle, Matthew, Boulder, CO, United States Bergum, Peter W., San Diego, CA, United States		
PATENT ASSIGNEE(S):	Corvas International, Inc., San Diego, CA, United States (U.S. corporation)		

	NUMBER	DATE	
PATENT INFORMATION:	US 6090916	20000718	
	WO 9612021	19960425	
APPLICATION INFO.:	US 1997-809455	19971124	(8)
	WO 1995-US13231	19951017	
		19971124	PCT 371 date
		19971124	PCT 102(e) date
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1995-461965, filed on 5 Jun 1995, now patented, Pat. No. US 5872098 And a continuation-in-part of Ser. No. US 1995-465380, filed on 5 Jun 1995, now patented, Pat. No. US 5863894 And a continuation-in-part of Ser. No. US 1995-486397, filed on 5 Jun 1995, now patented, Pat. No. US 5866542 And a continuation-in-part of Ser. No. US 1995-486399, filed on 5 Jun 1995, now patented, Pat. No. US 5866543 which is a continuation-in-part of Ser. No. US 1994-326110, filed on 15 Oct 1994, now patented, Pat. No. US 5945275		
DOCUMENT TYPE:	Utility		
PRIMARY EXAMINER:	Wax, Robert A.		
LEGAL REPRESENTATIVE:	Lyon & Lyon LLP		
NUMBER OF CLAIMS:	73		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	51 Drawing Figure(s); 51 Drawing Page(s)		
LINE COUNT:	7802		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 48 USPATFULL
ACCESSION NUMBER: 2000:88314 USPATFULL
TITLE: Nematode-extracted serine protease inhibitors and anticoagulant proteins
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Dilbeek, Belgium
Lauwereys, Marc Josef, Haaltert, Belgium
LaRoche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Boulder, CA, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6087487	20000711
APPLICATION INFO.:	US 1999-249451	19990212 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 809455
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 51 Drawing Page(s)
LINE COUNT: 7534
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 48 USPATFULL
ACCESSION NUMBER: 2000:41163 USPATFULL
TITLE: Nematode-extracted serine protease inhibitors and anticoagulant proteins
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Dilbeek, Belgium
Lauwereys, Marc Josef, Haaltert, Belgium
LaRoche, Yves Rene, Bruxelles, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Boulder, CO, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6046318	20000404
APPLICATION INFO.:	US 1999-249472	19990212 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 809455
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 51 Drawing Page(s)
LINE COUNT: 8615
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 48 USPATFULL
ACCESSION NUMBER: 2000:34685 USPATFULL

TITLE: Ne de-extracted serine protease inhibitor and an agulant proteins

INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Dilbeek, Belgium
Lauwereys, Marc Josef, Haaltert, Belgium
LaRoche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Boulder, CO, United States
Bergum, Peter W., San Diego, CA, United States

PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 6040441	20000321
APPLICATION INFO.:	US 1999-249471	19990212 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 809455
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 51 Drawing Page(s)
LINE COUNT: 7533
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 48 USPATFULL
ACCESSION NUMBER: 1999:146778 USPATFULL
TITLE: Expression of pace in host cells and methods of use thereof

INVENTOR(S): Barr, Philip J., Berkeley, CA, United States
Brake, Anthony J., Berkeley, CA, United States
Kaufman, Randal J., Boston, MA, United States
Tekamp-Olson, Patricia, San Anselmo, CA, United States
Wasley, Louise, Medfield, MA, United States
Wong, Polly A., Mountain View, CA, United States

PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5986079	19991116
APPLICATION INFO.:	US 1995-480382	19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1992-885972, filed on 20 May 1992, now patented, Pat. No. US 5460950 which is a continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Achutamurthy, Ponnathapura
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Howson and Howson
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 2715
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 14 OF 48 USPATFULL
ACCESSION NUMBER: 1999:128398 USPATFULL
TITLE: Mast cell protease that cleaves fibrinogen
INVENTOR(S): Stevens, Richard L., Sudbury, MA, United States
PATENT ASSIGNEE(S): Brigham and Womens's Hospital, Inc., Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5968782	19991019
APPLICATION INFO.:	US 1997-978404	19971125 (8)
PRIORITY INFORMATION:	US 1996-32354	19961204 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Wolf, Greenfield & Sacks, P.C.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 3794
AB Compositions containing a Trypson-like serine protease from mast cells ("tryptase-7") are provided. The compositions are useful for treating blood clot formation in vitro and in in vitro. Also provided is a novel bioengineering method to produce the tryptase-7 and other serine proteases in active form and in large quantities.

L4 ANSWER 15 OF 48 USPATFULL
ACCESSION NUMBER: 1999:124761 USPATFULL
TITLE: Expression of pace in host cells and methods of use thereof
INVENTOR(S): Barr, Philip J., Berkeley, CA, United States
Brake, Anthony J., Berkeley, CA, United States
Kaufman, Randal J., Boston, MA, United States
Tekamp-Olson, Patricia, San Anselmo, CA, United States
Wasley, Louise, Medfield, MA, United States
Wong, Polly A., Mountain View, CA, United States
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)
Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5965425	19991012
APPLICATION INFO.:	US 1996-745880	19961108 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-480382, filed on 7 Jun 1995 which is a division of Ser. No. US 1992-885972, filed on 20 May 1992, now patented, Pat. No. US 5460950 which is a continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned Ser. No. Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Achutamurthy, Ponnathapura
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Howson and Howson
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 2718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 16 OF 48 USPATFULL
ACCESSION NUMBER: 1999:121169 USPATFULL
TITLE: Protease inhibitor peptides
INVENTOR(S): White, R. Tyler, Fremont, CA, United States

Da[redacted]Deborah, Redwood City, CA, United Stat[redacted]
Le[redacted]r, David D., Palo Alto, CA, United Sta[redacted]
McFadden, Kathleen, Mountain View, CA, United States
Garrick, Brett L., Palo Alto, CA, United States
PATENT ASSIGNEE(S): Scios, Inc., Mountain View, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5962266	19991005
APPLICATION INFO.:	US 1997-829876	19970402 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-436555, filed on 8 May 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Prouty, Rebecca E.
ASSISTANT EXAMINER: Slobodyansky, Elizabeth
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 4412
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Analogues of the Kunitz Protease Inhibitor (KPI) domain of amyloid precursor protein bind to and inhibit activity of serine proteases, including kallikrein, plasmin and coagulation factors such as factors VIIa, IXa, Xa, XIa, and XIIa. Pharmaceutical compositions containing the KPI analogues, along with methods for using such compositions, are useful for ameliorating and treating clinical conditions associated with increased serine protease activity, such as blood loss related to cardiopulmonary bypass surgery. Nucleic acid sequences encoding these analogues and systems for expression of the peptides of the invention are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 17 OF 48 USPATFULL
ACCESSION NUMBER: 1999:113718 USPATFULL
TITLE: Mast cell protease peptide inhibitors
INVENTOR(S): Stevens, Richard L., Sudbury, MA, United States
Huang, Chifu, Boston, MA, United States
PATENT ASSIGNEE(S): Brigham and Women's Hospital, Inc., Boston, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5955431	19990921
APPLICATION INFO.:	US 1998-16366	19980130 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-37090	19970205 (60)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Tsang, Cecilia J.
ASSISTANT EXAMINER: Borin, Michael
LEGAL REPRESENTATIVE: Wolf, Greenfield & Sacks P.C.
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
LINE COUNT: 2314
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for inhibiting a complex containing a mast cell protease are provided. The compositions are useful for treating inflammatory disorders, such as asthma, that are mediated by release of a tryptase-6 protein. Methods for identifying additional specific inhibitors of a complex containing tryptase-6 protein and a serglycin glycosaminoglycan also are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 18 OF 48 USPATFULL
ACCESSION NUMBER: 1999:113582 USPATFULL
TITLE: Nematode-extracted serine protease inhibitors and anticoagulant proteins
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerp, Belgium
Lauwereys, Marc Josef, Haaltert, Belgium
LaRoche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Ichtegem, Belgium
Moyle, Matthew, Escondido, CA, United States

PATENT ASSIGNEE(S): Ber Peter W., San Diego, CA, United State
Cor International, Inc., San Diego, CA, U d
States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5955294	19990921
APPLICATION INFO.:	US 1996-634641	19960419 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-461965, filed on 5 Jun 1995 Ser. No. Ser. No. US 1995-465380, filed on 5 Jun 1995 Ser. No. Ser. No. US 1995-486397, filed on 5 Jun 1995 Ser. No. Ser. No. US 1995-486399, filed on 5 Jun 1995 Ser. No. Ser. No. US 1994-326110, filed on 18 Oct 1994 And Ser. No. WO 1995-US13231, filed on 17 Oct 1995 which is a continuation-in-part of Ser. No. US 461965 Ser. No. Ser. No. US 465380 Ser. No. Ser. No. US 486397 And Ser. No. US 486399 , each Ser. No. US which is a continuation-in-part of Ser. No. US 326110

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 48 Drawing Page(s)
LINE COUNT: 7958
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins which have activity as anticoagulants and/or serine protease inhibitors and have at least one NAP domain and are described. Certain of these proteins have factor Xa inhibitory activity and others have activity as inhibitors of factor VIIa/TF. These proteins can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 19 OF 48 USPATFULL
ACCESSION NUMBER: 1999:102664 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerpen, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Bredene, Belgium
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5945275	19990831
APPLICATION INFO.:	US 1994-326110	19941018 (8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 4
NUMBER OF DRAWINGS: 19 Drawing Figure(s); 29 Drawing Page(s)
LINE COUNT: 3413
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 20 OF 48 USPATFULL
ACCESSION NUMBER: 1999:92541 USPATFULL
TITLE: Protein expression system
INVENTOR(S): Sgarlato, Gregory D., Los Gatos, CA, United States
PATENT ASSIGNEE(S): Technologene, Inc., Los Gatos, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5935824	19990810
APPLICATION INFO.:	US 1996-595043	19960131 (8)

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Ulm[redacted]hn
LEGAL REPRESENTATIVE: Med[redacted] & Carroll, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 44 Drawing Page(s)
LINE COUNT: 5959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to improved recombinant vectors which allow for the production of fusion proteins. The present invention also relates to methods for the expression and purification of authentic recombinant proteins from such fusion proteins. In particular, the present invention relates to fusion proteins wherein additional domains and/or elements are added to the fusion proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 21 OF 48 USPATFULL
ACCESSION NUMBER: 1999:22079 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerp, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Bredene, Belgium
Moyle, Matthew, Escondido, CA, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5872098	19990216
APPLICATION INFO.:	US 1995-461965	19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-326110, filed on 18 Oct 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 45 Drawing Page(s)
LINE COUNT: 7119
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 22 OF 48 USPATFULL
ACCESSION NUMBER: 1999:15897 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerpen, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Bredene, Belgium
Moyle, Matthew, Escondido, CA, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5866543	19990202
APPLICATION INFO.:	US 1995-486399	19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-326110, filed on 18 Oct 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 45 Drawing Page(s)

LINE COUNT: 70
CAS INDEXING IS AVAILABLE THIS PATENT.
AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 23 OF 48 USPATFULL
ACCESSION NUMBER: 1999:15896 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Matens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerp, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene n, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick George Jozef, Bredene, Belgium
Moyle, Matthew, Escondido, CA, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5866542	19990202
APPLICATION INFO.:	US 1995-486397	19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-326110, filed on 18 Oct 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 50
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 45 Drawing Page(s)
LINE COUNT: 7106
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 24 OF 48 USPATFULL
ACCESSION NUMBER: 1999:13017 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerp, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Bredene, Belgium
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5864009	19990126
APPLICATION INFO.:	US 1995-480478	19950606 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-326110, filed on 18 Oct 1994
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 31 Drawing Figure(s); 28 Drawing Page(s)
LINE COUNT: 3503
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE F HIS PATENT.

L4 ANSWER 25 OF 48 USPATFULL
ACCESSION NUMBER: 1999:12903 USPATFULL
TITLE: Nematode-extracted anticoagulant protein
INVENTOR(S): Vlasuk, George Phillip, Carlsbad, CA, United States
Stanssens, Patrick Eric Hugo, St-Martens-Latem, Belgium
Messens, Joris Hilda Lieven, Antwerp, Belgium
Lauwereys, Marc Jozef, Haaltert, Belgium
Laroche, Yves Rene, Brussels, Belgium
Jespers, Laurent Stephane, Tervuren, Belgium
Gansemans, Yannick Georges Jozef, Bredene, Belgium
Moyle, Matthew, Escondido, CA, United States
Bergum, Peter W., San Diego, CA, United States
PATENT ASSIGNEE(S): Corvas International, Inc., San Diego, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5863894	19990126
APPLICATION INFO.:	US 1995-465380	19950605 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-326110, filed on 18 Oct 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Lau, Kawai
LEGAL REPRESENTATIVE: Lyon & Lyon LLP
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 48 Drawing Figure(s); 45 Drawing Page(s)
LINE COUNT: 7109
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Proteins which are potent anticoagulants and have at least one NAP domain and are described. These proteins having anticoagulant activity can be isolated from natural sources such as nematodes, chemically synthesized or made by recombinant methods using various DNA expression systems.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 26 OF 48 USPATFULL
ACCESSION NUMBER: 1998:92179 USPATFULL
TITLE: Development of research diagnostic and production tools for pro-hormone convertases
INVENTOR(S): Seidah, Nabil G., Ile-des-Soeurs, Canada
Chretien, Michel, Montreal, Canada
PATENT ASSIGNEE(S): Institut de Recherches Cliniques de Montreal, Montreal, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5789564	19980804
APPLICATION INFO.:	US 1996-712241	19960912 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-529785, filed on 18 Sep 1995, now abandoned which is a continuation of Ser. No. US 1992-963535, filed on 20 Oct 1992, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Houtteman, Scott W.
LEGAL REPRESENTATIVE: Quarles & Brady
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to pro-hormone convertases and polypeptidic fragments thereof, nucleic acids encoding them, recombinant viruses expressing these convertases, polyclonal antibodies directed against the convertases, diagnostic kits for the detection and measurement of the convertase content in cell or tissue lysates, culture media or biological fluids by RIA. Diagnostic kits were also developped for detection or measurement of nucleic acids, preferably mRNAs, in cell or tissue lysates by hybridization. The invention also concerns oligonucleotides useful as probes or as primers for DNA synthesis. These oligonucleotides were included in the diagnostic kits as well as used for the obtention of specific fragments of the convertases which have served, together with native convertases, as antigens for the obtention of antibodies. The convertases were produced by mammalian cell lines transfected with the recombinant viruses and purified on affinity columns which are also an object of the invention. Processes for producing the native convertases, fragments thereof and antibodies are also described and claimed.

CAS INDEXING IS AVAILABLE THIS PATENT.

L4 ANSWER 27 OF 48 USPATFULL
ACCESSION NUMBER: 1998:68808 USPATFULL
TITLE: Polypeptides
INVENTOR(S): Ballance, David J., Nottingham, United Kingdom
Goodey, Andrew R., Nottingham, United Kingdom
PATENT ASSIGNEE(S): Delta Biotechnology Limited, Nottingham, United Kingdom (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5766883	19980616
APPLICATION INFO.:	US 1993-153799	19931117 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-847975, filed on 6 Mar 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-775952, filed on 29 Oct 1991, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1989-9916	19890429
	WO 1990-GB650	19900426

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Grimes, Eric
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 1179
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fusion polypeptide comprising, as at least part of the N-terminal portion thereof, an N-terminal portion of HSA or a variant thereof and, as at least part of the C-terminal portion thereof, another polypeptide except that, when the said N-terminal portion of HSA is the 1-n portion where n is 369 to 419 or a variant thereof then the said polypeptide is one of various specified entities.

The HSA-like portion may have additional N-terminal residues, such as secretion leader sequences (signal sequences). The C-terminal portion is preferably the amino terminal fragment of human urokinase-type plasminogen activator. The N-terminal and C-terminal portions may be cleavable to yield the isolated C-terminal portion, with the N-terminal portion having served to facilitate secretion from the host. Such cleavage can be achieved in yeast using a sequence cleavable by the KEX2 protease of S. cerevisiae.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 28 OF 48 USPATFULL
ACCESSION NUMBER: 97:123076 USPATFULL
TITLE: Processes for producing an enzyme
INVENTOR(S): Hastrup, Sven, K.o slashed.benhavn V., Denmark
Branner, Sven, Lyngby, Denmark
J.o slashed.rgensen, Birthe Ravn, S.o slashed.borg, Denmark
Christensen, Tove, Lyngby, Denmark
J.o slashed.rgensen, Birgitte Bojer, Kokkedal, Denmark
Shuster, Jeffrey R., Davis, CA, United States
Madden, Mark, Pleasant Hill, CA, United States
Moyer, Donna L., Davis, CA, United States
Fuglsang, Claus, Copenhaven NV, Denmark
PATENT ASSIGNEE(S): Novo Nordisk A/S, Bagsvaerd, Denmark (non-U.S. corporation)
Novo Nordisk Biotech, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5702934	19971230
APPLICATION INFO.:	US 1994-238130	19940504 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	DK 1993-522	19930505

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Prouty, Rebecca E.
LEGAL REPRESENTATIVE: Zelson, Steve T.; Agris, Cheryl H.
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 wing Figure(s); 9 Drawing Page(s)
LINE COUNT: 15
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is related to a process for producing an active enzyme comprising fermenting the proform of the active enzyme in the present of a proteolytic enzyme different from the active enzyme and capable of converting the proenzyme into an active enzyme as well as to host cells, recombinant expression vectors and host cells suitable for use in the process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 29 OF 48 USPATFULL
ACCESSION NUMBER: 97:81118 USPATFULL
TITLE: Cloning of enterokinase and method of use
INVENTOR(S): LaVallie, Edward R., Tewksbury, MA, United States
PATENT ASSIGNEE(S): Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5665566	19970909
APPLICATION INFO.:	US 1994-200900	19940223 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-5944, filed on 15 Jan 1993, now abandoned
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Caputa, Anthony C.
LEGAL REPRESENTATIVE: Meinert, M. C.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 9,10,11,12
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT: 1450
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are nucleic acid sequence sequences encoding enterokinase activity, the expression products thereof, and methods for using same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 30 OF 48 USPATFULL
ACCESSION NUMBER: 97:54115 USPATFULL
TITLE: Expression system for the secretion of bioactive human granulocyte macrophage colony stimulating factor (GM-CSF) and other heterologous proteins from steptomyces
INVENTOR(S): Garvin, Robert T., Toronto, Canada
Malek, Lawrence T., Brampton, Canada
PATENT ASSIGNEE(S): Cangene Corporation, Mississauga, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5641663	19970624
APPLICATION INFO.:	US 1994-318193	19941005 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-935314, filed on 26 Aug 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-844937, filed on 4 Mar 1992, now abandoned which is a continuation of Ser. No. US 1988-221346, filed on 18 Jul 1988, now abandoned And Ser. No. US 1988-224568, filed on 26 Jul 1988, now patented, Pat. No. US 5200327 , each Ser. No. US - which is a continuation-in-part of Ser. No. US 1992-863546, filed on 6 Apr 1992, now abandoned which is a continuation of Ser. No. US 1991-646466, filed on 25 Jan 1991, now abandoned which is a continuation of Ser. No. US 1985-795331, filed on 6 Nov 1985, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1987-542678	19870727
	CA 1988-572956	19880725

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Fleisher, Mindy
ASSISTANT EXAMINER: Degen, Nancy J.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 36 Drawing Figure(s); 31 Drawing Page(s)
LINE COUNT: 2800
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gene expression system is used to produce heterologous biologically active proteins, in particular bioactive granulocyte macrophage colony stimulating factor ("GM-CSF"), secreted from a host selected from the Streptomyces genera. The gene expression system includes a regulatory nucleotide sequence linked to a second nucleotide sequence encoding the heterologous protein. The regulatory sequence, encodes a peptide which directs the secretion of the heterologous protein in bioactive form from a host selected from the Streptomyces genera. The regulatory sequence includes a signal sequence and a promoter sequence. The second nucleotide sequence, which encodes GM-CSF or a biologically active derivative of GM-CSF, may be either natural or synthetic. In particular, the invention relates to an expression system for secreting bioactive, non-glycosylated, oxidized, therapeutically useful GM-CSF from a host selected from the Streptomyces genera.

Also disclosed are similar constructs for expression of interleukin 3 (IL-3), interleukin 6 (IL-6), tumor necrosis factor alpha (TNF.alpha.), human stem cell factor (SCF), interleukin 7 (IL-7), erythropoietin (EPO) and interleukin 2 (IL-2). Novel signal peptides of these constructs include hybrids of the signal peptides of Streptomyces griseus protease B and Escherichia coli omp A, hybrids of Streptomyces griseus protease B and Streptomyces limosus .alpha.-amylase signal peptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 31 OF 48 USPATFULL

ACCESSION NUMBER:	95:94816 USPATFULL
TITLE:	Expression of PACE in host cells and methods of use thereof
INVENTOR(S):	Barr, Philip J., Berkeley, CA, United States Brake, Anthony J., Berkeley, CA, United States Kaufman, Randal J., Boston, MA, United States Wasley, Louise, Medfield, MA, United States Tekamp-Olson, Patricia, San Anselmo, CA, United States Wong, Polly A., Mountain View, CA, United States
PATENT ASSIGNEE(S):	Genetics Institute, Inc., Cambridge, MA, United States (U.S. corporation) Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5460950	19951024
APPLICATION INFO.:	US 1992-885972	19920520 (7)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-621092, filed on 26 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-620859, filed on 29 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-621443, filed on 29 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1990-621457, filed on 30 Nov 1990, now abandoned
DOCUMENT TYPE:	Utility
PRIMARY EXAMINER:	Wax, Robert A.
ASSISTANT EXAMINER:	Moore, William W.
LEGAL REPRESENTATIVE:	Howson and Howson
NUMBER OF CLAIMS:	60
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT:	2683

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods are provided for endopeptidase production and for enhanced efficiencies of processing heterologous precursor polypeptides to mature polypeptides, including proteins requiring gamma-carboxylation for biological activity. These compositions and methods utilize recombinant PACE, a mammalian endopeptidase that is specific for dibasic amino acid sites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 32 OF 48 USPATFULL

ACCESSION NUMBER:	94:30982 USPATFULL
TITLE:	Plasmid coding for human protein C
INVENTOR(S):	Foster, Donald C., Seattle, WA, United States Davie, Earl W., Bellevue, WA, United States
PATENT ASSIGNEE(S):	The Board of Regents of the University of Washington, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE

PATENT INFORMATION: US [redacted]02529 19940412
APPLICATION INFO.: US [redacted]90-512961 19900423 (7)
DISCLAIMER DATE: 20071106
RELATED APPLN. INFO.: Continuation of Ser. No. US 1985-766109, filed on 15 Aug 1985, now patented, Pat. No. US 4968626
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Cook, Dian
LEGAL REPRESENTATIVE: Seed and Berry
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 13 Drawing Page(s)
LINE COUNT: 371
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genomic and cDNA sequences coding for a protein having substantially the same biological activity as human protein C are disclosed. Recombinant plasmids and bacteriophage transfer vectors incorporating these sequences are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 33 OF 48 USPATFULL
ACCESSION NUMBER: 93:104688 USPATFULL
TITLE: Vectors and compounds for expression of human protein C
INVENTOR(S): Bang, Nils U., Indianapolis, IN, United States
Beckmann, Robert J., Indianapolis, IN, United States
Jaskunas, S. R., Indianapolis, IN, United States
Lai, Mei-Huei T., Carmel, IN, United States
Little, Sheila P., Indianapolis, IN, United States
Long, George L., Indianapolis, IN, United States
Santerre, Robert F., Zionsville, IN, United States
PATENT ASSIGNEE(S): Eli Lilly and Company, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5270040	19931214
APPLICATION INFO.:	US 1992-907499	19920701 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1988-215112, filed on 5 Jul 1988, now patented, Pat. No. US 5151268 which is a division of Ser. No. US 1985-699967, filed on 8 Feb 1985, now patented, Pat. No. US 4775624
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Patterson, Jr., Charles L.
LEGAL REPRESENTATIVE: Norman, Douglas K.; Whitaker, Leroy
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 2792
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention comprises novel DNA compounds which encode human protein C activity. A variety of eukaryotic and prokaryotic recombinant DNA expression vectors have been constructed that comprise the novel protein C activity-encoding DNA and drive expression of protein C activity when transformed into an appropriate host cell. The novel expression vectors can be used to produce protein C derivatives, such as non-carboxylated, non-glycosylated, or non-hydroxylated protein C, and to produce protein C precursors, such as nascent or **zymogen** protein C, and to produce subfragments of protein C, such as active or inactive light and heavy chain. The recombinant-produced protein C activity is useful in the treatment and prevention of a variety of vascular disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 34 OF 48 USPATFULL
ACCESSION NUMBER: 93:27016 USPATFULL
TITLE: Expression system for the secretion of bioactive human granulocyte macrophage colony stimulating factor (GM-CSF) and other heterologous proteins from streptomyces
INVENTOR(S): Garvin, Robert T., Toronto, Canada
Malek, Lawrence T., Brampton, Canada
PATENT ASSIGNEE(S): Cangene Corporation, Mississauga, Canada (non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5200327	19930406
APPLICATION INFO.:	US 1988-224568	19880726 (7)

RELATED APPLN. INFO.: Con[redacted]uation-in-part of Ser. No. US 1985-795[redacted] filed on [redacted]ov 1985, now abandoned And a continuat[redacted]in-part of Ser. No. US 1988-221346, filed on 18 Jul 1988, now abandoned

	NUMBER	DATE
PRIORITY INFORMATION:	CA 1988-572956	19880725

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Nolan, S. L.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1,7,14
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 1299
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gene expression system is used to produce heterologous biologically active proteins, in particular bioactive granulocyte macrophage colony stimulating factor ("GM-CSF"), secreted from a host selected from the Streptomyces genera. The gene expression system includes a regulatory nucleotide sequence linked to a second nucleotide sequence encoding the heterologous protein. The regulatory sequence, encodes a peptide which directs the secretion of the heterologous protein in bioactive form from a host selected from the Streptomyces genera. The regulatory sequence includes a signal sequence and a promoter sequence. The second nucleotide sequence, which encodes GM-CSF or a biologically active derivative of GM-CSF, may be either natural or synthetic. In particular, the invention relates to an expression system for secreting bioactive, non-glycosylated, oxidized, therapeutically useful GM-CSF from a host selected from the Streptomyces genera.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 35 OF 48 USPATFULL
ACCESSION NUMBER: 92:80669 USPATFULL
TITLE: Methods of using recombinant human protein C
INVENTOR(S): Bang, Nils U., Indianapolis, IN, United States
Beckmann, Robert J., Indianapolis, IN, United States
Jaskunas, S. Richard, Indianapolis, IN, United States
Lai, Mei-Huei T., Carmel, IN, United States
Little, Sheila P., Indianapolis, IN, United States
Long, George L., Indianapolis, IN, United States
Santerre, Robert F., Zionsville, IN, United States
PATENT ASSIGNEE(S): Eli Lilly and Company, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5151268	19920929
APPLICATION INFO.:	US 1988-215112	19880705 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1985-699967, filed on 8 Feb 1985, now patented, Pat. No. US 4775624
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Stone, Jacqueline
LEGAL REPRESENTATIVE: Norman, Douglas K.; Whitaker, Leroy
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 2825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention comprises novel DNA compounds which encode human protein C activity. A variety of eukaryotic and prokaryotic recombinant DNA expression vectors have been constructed that comprise the novel protein C activity-encoding DNA and drive expression of protein C activity when transformed into an appropriate host cell. The novel expression vectors can be used to produce protein C derivatives, such as non-carboxylated, non-glycosylated, or non-hydroxylated protein C, and to produce protein C precursors, such as nascent or **zymogen** protein C, and to produce sub-fragments of protein C, such as active or inactive light and heavy chain. The recombinant-produced protein C activity is useful in the treatment and prevention of a variety of vascular disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 36 OF 48 USPATFULL
ACCESSION NUMBER: 91:102275 USPATFULL
TITLE: DNA sequence coding for protein C
INVENTOR(S): Foster, Donald C., Seattle, WA, United States

PATENT ASSIGNEE(S): Dav Earl W., Bellevue, WA, United States
The rd of Regents of the University of Wa gton, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 5073609	19911217
APPLICATION INFO.:	US 1989-375260	19890629 (7)

DISCLAIMER DATE: 20071106
RELATED APPLN. INFO.: Division of Ser. No. US 1985-766109, filed on 15 Aug 1985, now patented, Pat. No. US 4968626
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Schwartz, Richard A.
ASSISTANT EXAMINER: Cook, Dian
LEGAL REPRESENTATIVE: Seed and Berry
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 365
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genomic and cDNA sequences coding for a protein having substantially the same biological activity as human protein C are disclosed. Recombinant plasmids and bacteriophage transfer vectors incorporating these sequences are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 37 OF 48 USPATFULL
ACCESSION NUMBER: 90:85563 USPATFULL
TITLE: DNA sequence coding for protein C
INVENTOR(S): Foster, Donald C., Seattle, WA, United States
Davie, Earl W., Bellevue, WA, United States
PATENT ASSIGNEE(S): Board of Reagents of the University of Washington, Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4968626	19901106
APPLICATION INFO.:	US 1985-766109	19850815 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Mays, Thomas D.
LEGAL REPRESENTATIVE: Seed and Berry
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 360
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genomic and cDNA sequences coding for a protein having substantially the same biological activity as human protein C are disclosed. Recombinant plasmids and bacteriophage transfer vectors incorporating these sequences are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 38 OF 48 USPATFULL
ACCESSION NUMBER: 90:75052 USPATFULL
TITLE: Expression of protein C
INVENTOR(S): Foster, Donald C., Seattle, WA, United States
Murray, Mark J., Seattle, WA, United States
Berkner, Kathleen L., Seattle, WA, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4959318	19900925
APPLICATION INFO.:	US 1986-924462	19861029 (6)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1985-749600, filed on 27 Jun 1985
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Mays, Thomas D.
LEGAL REPRESENTATIVE: Seed and Berry
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Figure(s); 15 Drawing Page(s)
LINE COUNT: 1287
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Genomic and cDNA sequences coding for a protein having substantially the same biological activity as human protein C and recombinant transfer vectors comprising these sequences are disclosed.

Methods are disclos or producing a protein which has subs ially the same biological activity as human protein C. The protein, wnich may be in the form of activated protein C, is produced by mammalian host cells transfected with a plasmid capable of integration in mammalian host cell DNA. The plasmid includes a promoter followed downstream by a nucleotide sequence which encodes a protein having substantially the same structure and/or activity as human protein C, the nucleotide sequence being followed downstream by a polyadenylation signal.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 39 OF 48 USPATFULL
ACCESSION NUMBER: 88:63998 USPATFULL
TITLE: Vectors and compounds for expression of human protein C
INVENTOR(S): Bang, Nils U., Indianapolis, IN, United States
Beckmann, Robert J., Indianapolis, IN, United States
Jaskunas, S. Richard, Indianapolis, IN, United States
Lai, Mei-Huei T., Carmel, IN, United States
Little, Shelia P., Indianapolis, IN, United States
Long, George L., Indianapolis, IN, United States
Santerre, Robert F., Zionsville, IN, United States
PATENT ASSIGNEE(S): Eli Lilly and Company, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 4775624	19881004
APPLICATION INFO.:	US 1985-699967	19850208 (6)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Wiseman, Thomas G.
ASSISTANT EXAMINER: Mays, Thomas D.
LEGAL REPRESENTATIVE: Dahling, Gerald V.; Whitaker, Leroy
NUMBER OF CLAIMS: 82
EXEMPLARY CLAIM: 12
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3091
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention comprises novel DNA compounds which encode human protein C activity. A variety of eukaryotic and prokaryotic recombinant DNA expression vectors have been constructed that comprise the novel protein C activity-encoding DNA and drive expression of protein C activity when transformed into an appropriate host cell. The novel expression vectors can be used to produce protein C derivatives, such as non-carboxylated, non-glycosylated, or non-hydroxylated protein C, and to produce protein C precursors, such as nascent or **zymogen** protein C, and to produce sub-fragments of protein C, such as active or inactive light and heavy chain. The recombinant-produced protein C activity is useful in the treatment and prevention of a variety of vascular disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 40 OF 48 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999-059646 [05] WPIDS
DOC. NO. CPI: C1999-017483
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** and a heterologous polypeptide.
DERWENT CLASS: B04 D13 D16
INVENTOR(S): ALCANTARA, J; MOLONEY, M; VAN ROOIJEN, G; VAN ROOI-JEN, G
PATENT ASSIGNEE(S): (SEMB-N) SEMBIOSYS GENETICS INC
COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9849326	A1	19981105	(199905)*	EN	43
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
ZA 9803471	A	19990127	(199910)		53
AU 9870240	A	19981124	(199914)		
EP 977873	A1	20000209	(200012)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					

BR 9809416 A 2000 (200037)
MX 9909801 A1 2000 (200123)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9849326	A1	WO 1998-CA398	19980423
ZA 9803471	A	ZA 1998-3471	19980424
AU 9870240	A	AU 1998-70240	19980423
EP 977873	A1	EP 1998-916746	19980423
		WO 1998-CA398	19980423
BR 9809416	A	BR 1998-9416	19980423
		WO 1998-CA398	19980423
MX 9909801	A1	MX 1999-9801	19991025

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9870240	A	Based on	WO 9849326
EP 977873	A1	Based on	WO 9849326
BR 9809416	A	Based on	WO 9849326

PRIORITY APPLN. INFO: US 1997-44254 19970425
AN 1999-059646 [05] WPIDS
AB WO 9849326 A UPAB: 19990316
Preparation of a recombinant polypeptide comprising: (a) introducing into a host cell an expression vector comprising: (i) a nucleic acid sequence capable of regulating transcription in a host cell, operatively linked to; (ii) a chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen**, linked in reading frame to a nucleic acid sequence heterologous to the **pro-peptide** and encoding the recombinant polypeptide, operatively linked to; (iii) a nucleic acid sequence encoding a termination region functional in the host cell; (b) growing the host cell to produce the **fusion protein**, and (c) altering the environment of the **fusion protein** so that the **pro-peptide** is cleaved from the **fusion protein** to release the recombinant polypeptide. Also claimed are: (1) a chimeric nucleic acid sequence encoding a **fusion protein** comprising: (a) a nucleic acid sequence encoding a **pro-peptide** from an autocatalytically maturing **zymogen**, and (b) a nucleic acid sequence encoding a polypeptide that is heterologous to the **pro-peptide**; (2) an expression vector comprising a chimeric nucleic acid sequence as in (1) and a regulatory sequence suitable for expression in a host cell; (3) a transformed host cell containing an expression vector as in (2), and (4) a **fusion protein** comprising: (i) a **pro-peptide** derived from an autocatalytically maturing **zymogen**, linked to, and (ii) a polypeptide that is heterologous to the **pro-peptide**.
USE - The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone (claimed). The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase (claimed).
ADVANTAGE - The method can provide for the efficient cleavage and purification of recombinant polypeptides.
Dwg.0/5

L4 ANSWER 41 OF 48 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999P-W87637 Protein DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence represents a **fusion protein** comprising a His tag-bovine chymosin **pro-peptide**-carp growth hormone. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic

acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L4 ANSWER 42 OF 48 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999P-W87636 Protein DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence represents a **fusion protein** comprising glutathione-S-transferase (GST)-bovine chymosin **pro-peptide**-leech hirudin. The chymosin **pro-peptide** sequence is placed upstream of the DNA sequence encoding the leech anticoagulant protein hirudin. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L4 ANSWER 43 OF 48 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999N-V83967 DNA DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence encodes a **fusion protein** comprising a His tag-bovine chymosin **pro-peptide**-carp growth hormone. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a

gastric lipase or a ase

L4 ANSWER 44 OF 48 DGENE COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1999N-V83966 DNA DGENE
TITLE: Preparation of recombinant polypeptides - by expression of a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** and a heterologous polypeptide
INVENTOR: Alcantara J; Moloney M; Van Rooijen G
PATENT ASSIGNEE: (SEMB-N)SEMBIOSYS GENETICS INC
PATENT INFO: WO 9849326 A1 19981105 44p
APPLICATION INFO: WO 1998-CA398 19980423
PRIORITY INFO: US 1997-44254 19970425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 1999-059646 [05]
AB The present sequence encodes a **fusion protein** comprising glutathione-S-transferase (GST)-bovine chymosin **pro-peptide**-leech hirudin. The chymosin **pro-peptide** sequence is placed upstream of the DNA sequence encoding the leech anticoagulant protein hirudin. The **fusion protein** was made to exemplify the invention. The specification describes a method for preparing a recombinant polypeptide in a host cell. A chimeric nucleic acid sequence encoding a **fusion protein** comprising a **pro-peptide** derived from an autocatalytically maturing **zymogen** linked a protein heterologous to the **pro-peptide**, is introduced into the host cell. The host cells are then grown to produce the **fusion protein**. Altering the environment of the **fusion protein** allows cleavage of the **pro-peptide** from the **fusion protein** to release the recombinant polypeptide. The method can be used for the preparation of recombinant polypeptides such as hirudin or carp growth hormone. The fusion proteins can be used for delivering to a human or animal a therapeutic or nutritional polypeptide such as a vaccine, a peptide antibiotic, a cattle feed enzyme, a cytokine, a gastric lipase or a lactase

L4 ANSWER 45 OF 48 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 785273 EUROPATFULL EW 199730 FS OS
TITLE: Paired basic amino acid converting enzyme and DNA sequence encoding it.
Gepaarte basische Aminosaeuren konvertierendes Enzym und dafuer kodierende DNA Sequenz.
Enzyme de conversion d'acides amines basiques couples et sequence d'ADN codant pour cette enzyme.
INVENTOR(S): Barr, Philip J., 2424 Stockbridge Drive, Oakland, CA 94611, US;
Brake, Anthony J., 2115 Los Angeles Avenue, Berkeley, CA 94707, US;
Kaufman, Randal J., 111 Marlborough Street, Apt. 1, Boston, MA 02116, US;
Tekamp-Olson, Patricia, 80 Camino de Herrera, San Anselmo, CA 94960, US;
Wasley, Louise, 11 Spring Valley Road, Medfield, MA 02052, US;
Wong, Polly A., 516 View Street, Mountain View, CA 94041, US
PATENT ASSIGNEE(S): GENETICS INSTITUTE, INC., 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, US;
CHIRON CORPORATION, 4560 Horton Street, R440, Emeryville California 94608-2916, US
PATENT ASSIGNEE NO: 538152; 572531
AGENT: Hale, Stephen Geoffrey, JY & GW Johnson, Kingsbourne House, 229-231 High Holborn, London WC1V 7DP, GB
AGENT NUMBER: 31411
OTHER SOURCE: ESP1997041 EP 0785273 A1 970723
SOURCE: Wila-EPZ-1997-H30-T1a
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPA1 EUROPAEISCHE PATENTANMELDUNG
PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 785273	A1	19970723
'OFFENLEGUNGS' DATE:		19970723

APPLICATION INFO.:	EP	-119683	19911126
PRIORITY APPLN. INFO.:	US	-621092	19901126
	US	1990-620859	19901126
	US	1990-621443	19901126
	US	1990-621457	19901130
RELATED DOC. INFO.:	EP 574402	DIV	

L4 ANSWER 46 OF 48 EUROPATFULL COPYRIGHT 2001 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 574402 EUROPATFULL EW 199740 FS PS
TITLE: EXPRESSION OF PACE IN HOST CELLS AND METHODS OF USE THEREOF.
EXPRESSION VON PACE IN WIRTSZELLEN UND VERFAHREN ZU DESSEN VERWENDUNG.
EXPRESSION DE PACE DANS DES CELLULES HOTES ET PROCEDES D'UTILISATION.
INVENTOR(S): BARR, Philip, J., 2424 Stockbridge Drive, Oakland, CA 94611, US;
BRAKE, Anthony, J., 2115 Los Angeles Avenue, Berkeley, CA 94707, US;
KAUFMAN, Randal, J. 111 Marlborough Street, Apt. 1, Boston, MA 02116, US;
TEKAMP-OLSON, Patricia, 80 Camino de Herrera, San Anselmo, CA 94960, US;
WASLEY, Louise, 11 Spring Valley Road, Medfield, MA 02052, US;
WONG, Polly, A., 516 View Street, Mountain View, CA 94041, US
PATENT ASSIGNEE(S): GENETICS INSTITUTE, INC., 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, US;
CHIRON CORPORATION, 4560 Horton Street, R440, Emeryville California 94608-2916, US
PATENT ASSIGNEE NO: 538152; 572531
AGENT: Hale, Stephen Geoffrey et al, JY & GW Johnson, Kingsbourne House, 229-231 High Holborn, London WC1V 7DP, GB
AGENT NUMBER: 31411
OTHER SOURCE: EPB1997064 EP 0574402 B1 971001
SOURCE: Wila-EPS-1997-H40-T1
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT (Internationale Anmeldung)
PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 574402	B1	19971001
'OFFENLEGUNGS' DATE:		19931222
APPLICATION INFO.: EP 1992-901535		19911126
PRIORITY APPLN. INFO.: US 1990-621092		19901126
US 1990-620859		19901129
US 1990-621443		19901129
US 1990-621457		19901130
RELATED DOC. INFO.: WO 91-US8725		911126 INTAKZ
WO 9209698		920611 INTPNR
REFERENCE PAT. INFO.: WO 89-09220 A		WO 91-06314 A
US 4770999 A		US 4784950 A

REF. NON-PATENT-LIT.: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA. vol. 87, no. 23, December 1990, WASHINGTON US ROBERT J. WISE ET AL. 'Expression of a human proprotein processing enzyme: Correct cleavage of the von Willebrand factor precursor at a paired basic amino acid site' THE JOURNAL OF CELL BIOLOGY vol. 111, no. 6, December 1990 pages 2851 - 2859 PATRICIA A. BRESNAHAN ET AL. 'Human fur gene encodes a yeast KEX2-like endoprotease that cleaves pro-beta -NGF in vivo' Nucleic Acids Research, Volume 18, No. 3, issued February 1990, VAN DEN OUWELAND et al., "Structural Homology Between the Human fur Gene Product and the Subtilisin Protease Encoded bny Yeast KEX2", see entire document

L4 ANSWER 47 OF 48 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 352707 EUROPATFULL EW 199005 FS OS STA B

TITLE: An [redacted]ession system for the secretion of bio[redacted]ive hum[redacted]granulocyte macrophage colony stimulati[redacted]factor (GM-CSF) and other heterologous proteins from streptomyces.
Expressionssystem fuer die Sekretion von bioaktivem, menschlichem granulozyt-makrophagem Koloniestimulierungsfaktor (GM-CSF) und anderen heterologen Proteinen aus Streptomyces.
Systeme d'expression pour la secretion du facteur de stimulation de colonies de granulocytes-macrophages (GM-CSF) et autres proteines heterologues a partir de streptomyces.

INVENTOR(S): Garvin, Robert T., 33 Deforest Road, Toronto Ontario, M6S 1J1, CA;
Malek, Lawrence T., 4 Sproule Drive, Brampton Ontario, L6V 4A5, CA

PATENT ASSIGNEE(S): Cangene Corporation, 3403 American Drive, Mississauga Ontario L4V 1T4, CA

PATENT ASSIGNEE NO: 805110

AGENT: Kolb, Helga, Dr. Dipl.-Chem. et al, Hoffmann, Eitle & Partner Patentanwaelte Arabellastrasse 4, D-8000 Muenchen 81, DE

AGENT NUMBER: 49371

OTHER SOURCE: ESP1990005 EP 0352707 A2 900131

SOURCE: Wila-EPZ-1990-H05-T1

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R DE; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE

PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG

PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 352707	A2	19900131

'OFFENLEGUNGS' DATE: 19900131

APPLICATION INFO.: EP 1989-113607 19890724

PRIORITY APPLN. INFO.: CA 1988-572956 19880725

L4 ANSWER 48 OF 48 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 266190 EUROPATFULL EW 198818 FS OS STA B

TITLE: Expression of protein C.
Expression von Protein-C.
Expression de proteine C.

INVENTOR(S): Foster, Donald C., 4908 N.E. 97th, Seattle Washington 98115, US;
Murray, Mark J., 2211- 11th Avenue East, Seattle Washington 98102, US;
Berkner, Kathleen L., 3032-22nd Avenue West, Seattle Washington 98199, US

PATENT ASSIGNEE(S): ZymoGenetics Inc., 2121 North 35th Street, Seattle Washington 98103, US

PATENT ASSIGNEE NO: 559660

AGENT: Brown, John David, et al, FORRESTER & BOEHMERT Widenmayerstrasse 4/I, D-8000 Muenchen 22, DE

OTHER SOURCE: ESP1988017 EP 0266190 A2 880504

SOURCE: Wila-EPZ-1988-H18-T1

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R DE; R FR; R GB; R IT; R LI; R LU; R NL; R SE

PATENT INFO.PUB.TYPE: EPA2 EUROPAEISCHE PATENTANMELDUNG

PATENT INFORMATION:

PATENT NO	KIND	DATE
EP 266190	A2	19880504

'OFFENLEGUNGS' DATE: 19880504

APPLICATION INFO.: EP 1987-309528 19871028

PRIORITY APPLN. INFO.: US 1986-924462 19861029

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